

Claims

1. A content playback apparatus that obtains a content section from content, and plays the obtained content section, the content

5 playback apparatus comprising:

a reference generation unit operable to generate a judgment reference that varies dynamically over a playback time axis of the content; and

a content section obtaining unit operable to obtain the content
10 section by comparing the content with the judgment reference.

2. The content playback apparatus of Claim 1, wherein

the content has a characteristic value that changes dynamically over the playback time axis,

15 the judgment reference is a threshold value group, and

the content section obtaining unit obtains a different piece of characteristic content from the content each time the characteristic value exceeds a threshold value in the threshold value group, and generates the content section from the at least one obtained
20 piece of characteristic content.

3. The content playback apparatus of Claim 2, wherein

the content is divided into a plurality of segments,

each segment is in correspondence with a different one of the
25 threshold values in the threshold value group, and

the content section obtaining unit compares the characteristic value with the threshold value corresponding to the segment having the characteristic value, and when the characteristic value exceeds

the compared threshold value, obtains, as a piece of characteristic content, a piece of content that composes the segment corresponding to the compared threshold value, and after performing the comparison and obtaining operations with respect to each of the segments,
5 generates the content section from the at least one obtained piece of content.

4. The content playback apparatus of Claim 3, wherein
the reference generation unit generates the threshold value
10 group using a threshold value generation function for determining the threshold value with respect to each segment, and

the content section obtaining unit, with respect to each segment, compares the characteristic value with the threshold value determined with respect to the segment using the threshold value generation
15 function.

5. The content playback apparatus of Claim 4, wherein
the threshold value generation function has a property of
monotonic increase and/or monotonic decrease on part of a domain
20 with respect to the playback time axis,

the reference generation unit calculates the threshold values in the threshold value group by, with respect to each segment, substituting, as an input value, a playback time of the segment on the playback time axis into the threshold value generation function,
25 and, after performing the calculation operation with respect to each segment, generates the threshold value group from the calculated threshold values, and

the content section obtaining unit compares, with respect to

each segment, the characteristic value with the threshold value calculated with respect to the segment using the threshold value generation function.

5 6. The content playback apparatus of Claim 5, wherein
the content section obtaining unit stores a predetermined reference time as a playback time of the content section, judges whether or not a total playback time of the at least one obtained piece of characteristic content is below the reference time, and
10 when the total playback time is judged to be below the reference time, arranges the at least one obtained piece of characteristic content in an order in which the at least one obtained piece of characteristic content was obtained, thereby generating the content section.

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7. The content playback apparatus of Claim 6, wherein
the reference generation unit holds the threshold value generation function expressed as a polynomial function of degree 1, and

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the content playback apparatus further comprises:

a control unit operable to, when the total playback time is judged by the content section obtaining unit to exceed the reference time, control so as to

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cause the reference generation unit to increase a value of a constant of proportion and/or intercept in the polynomial function of degree 1, thereby modifying the threshold value generation function,

cause the content section obtaining unit to perform an

operation for obtaining at least one piece of content using the modified threshold generation function, and

cause the reference generation unit to perform an operation for increasing the constant and the content section obtaining unit to perform an operation for obtaining at least one piece of content, until the total playback time of the obtained at least one piece of content is below the reference time.

10 8. The content playback apparatus of Claim 5, wherein the characteristic value is an importance value that shows viewing worth of the corresponding segment,

each threshold value shows a lower limit for allowing viewing of the corresponding segment, and

15 the content segment obtaining unit compares, for each segment, the importance value corresponding to the segment with the threshold value.

9. The content playback apparatus of Claim 8, wherein

20 viewership has been measured for each segment in the content, and

each importance value is set in advance based on results of measured viewership for the corresponding segment, such that the higher the viewership is, the higher the importance value is, and

25 the content section obtaining unit compares, for each segment, the importance value that is based on the viewership with the threshold value.

10. The content playback apparatus of Claim 8, wherein
the content includes at least moving images,
each importance value is set in advance based on duration of
appearance of subtitles in the corresponding segment, such that the
5 longer a time for which subtitles appear, the higher the importance
value is, and

the content section obtaining unit compares the importance
value that is based on the subtitle appearance time with the
corresponding threshold value.

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11. The content playback apparatus of Claim 8, wherein
each importance value is set in advance in accordance with
a preference of a user who is to view the content, such that the
higher the preference of the user, the higher the importance value
15 is, and

the content section obtaining unit compares the importance
value that is based on the preference of the user with the corresponding
threshold value.

20 12. The content playback apparatus of Claim 11, wherein
the content includes at least moving images,
each importance value is set in advance based on a length of
time of appearance of a predetermined performer in the corresponding
segment, such that the longer the time for which the performer appears,
25 the higher the importance value is, and

the content section obtaining unit compares the importance
value that is based on the length of time for which the performer
appears with the corresponding threshold value.

13. The content playback apparatus of Claim 5, wherein
the content includes at least audio,
the characteristic value is an audio level of the corresponding

5 segment,

the segment is a dialog segment that has an audio level of
at least a prescribed value, and is of a predetermined length of
time, and

the content section obtaining unit compares the audio level
10 of the dialog segment with the threshold value.

14. The content playback apparatus of Claim 5, wherein

the content is composed of content of a plurality of television
programs that are related to each other as components of one series,

15 and that have been broadcast up to a present time,

each television program content is divided into a plurality
of segments,

the threshold generation function has a property of monotonic
decrease that changes such that the threshold values decrease in
20 accordance with an order in which the plurality of television programs
were broadcast, and

the content section obtaining unit compares, with respect to
each segment, the characteristic value in the segment included in
the program content with the threshold value calculated using the
25 threshold value generation function.

15. The content playback apparatus of Claim 14, wherein

the content section obtaining unit (a) stores, in advance,

a viewing history that shows which of the plurality of television program contents the user has viewed, (b) judges, based on the viewing history, whether an unviewed television program content that the user has not yet viewed exists among the plurality of television program contents, and (c) when an unviewed television program content is judged to exist, increases the characteristic values corresponding to the plurality of segments in the unviewed television program content, and compares the increased characteristic values with the corresponding threshold values.

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16. The content playback apparatus of Claim 5, wherein the content section is obtainable by any of a plurality of types of methods,

the content playback apparatus further comprises:

15 a receiving unit operable to receive, from a user, a designation of one of the types of methods;

a function storage unit operable to pre-store a plurality of threshold value functions that correspond respectively to the plurality of types of methods; and

20 a function selection unit operable to select, based on the received type of method, a threshold generation function for generating the threshold values, and

the reference generation unit generates the threshold value group with use of the threshold value generation function selected
25 by the function selection unit.

17. The content playback apparatus of Claim 16, wherein each segment has a plurality of characteristic values that

each reflect a different one of preferences, each preference being of a different one of a plurality of users,

the receiving unit further receives at least some user IDs from among a plurality of user IDs that have been assigned respectively to the plurality of users, the received user IDs being those assigned to users who, among the plurality of users, wish to view the content section, and

the content section obtaining unit (a) pre-stores a plurality of user profiles in correspondence with the content, each user profile corresponding to a different one of the plurality of users and including, for each segment, a characteristic value that corresponds to the user, (b) obtains, for each received user ID, the corresponding user profile, (c) generates, based on the obtained user profiles, a common profile that includes a common characteristic value for each segment, each common characteristic value corresponding to a common preference of the users, and (d) using the common characteristic values in the generated common profile as the respective characteristic values for the segments, compares, with respect to each segment, the characteristic value in the segment with the threshold value corresponding to the characteristic value.

18. The content playback apparatus of Claim 17, wherein the characteristic value is an importance value that shows a viewing worth of the corresponding segment,

each common characteristic value is a common importance value that shows a viewing worth of the corresponding segment and that reflects the common preference of the users, and

the content section obtaining unit calculates each common

characteristic value with use of an importance value calculation function, the importance value calculation function using the importance values that correspond to the segments respectively as input values.

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19. The content playback apparatus of Claim 18, wherein the importance value calculation function calculates a total of input importance values.

10 20. The content playback apparatus of Claim 18, wherein the content section obtaining unit generates the content section by connecting pieces of content in descending order of common importance values corresponding to the segments in which the pieces of content exist.

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21. The content playback apparatus of Claim 18, wherein the content playback apparatus is connected to another content playback apparatus over a network, and further comprises:

20 a transmission unit operable to transmit the content section to the other content playback apparatus over the network.

22. The content playback apparatus of Claim 21, wherein the network is a home network.

25 23. The content playback apparatus of Claim 17, further comprising: a content storage unit operable to store, in advance, one or more recorded contents that are candidates for being the content; and

a content selection unit operable to select one recorded content from among the one or more candidate recorded contents, and set the selected recorded content as the content.

5 24. The content playback apparatus of Claim 23, wherein
the content storage unit stores a plurality of recorded content,
the content playback apparatus further comprises:

a viewer history storage unit operable to store in advance,
respectively for each user, a viewing history showing at least one
10 viewed television program content, and

the content selection unit selects, in accordance with the
viewing histories, one recorded content that at least one user has
not viewed, from among the plurality of recorded contents stored
in the content storage unit.

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25. The content playback apparatus of Claim 23, wherein
each user profile further includes an age of the corresponding
user,

the content storage unit stores a plurality of recorded content,
20 at least one of the plurality of recorded contents has been
assigned a parental lock for prohibiting viewing by a user who is
below predetermined age,

the content playback apparatus further comprises:

a judgment unit operable to judge, based on the ages of the
25 users in the user profiles, whether or not the at least one recorded
content to which the parental lock is assigned is permitted to be
viewed, and

the content selection unit, when the at least one recorded

content to which the parental lock is assigned is judged to not be permitted to be viewed, removes the at least one recorded content to which the parental lock is assigned from being a candidate for the content and selects one recorded content from remaining recorded contents, and when the at least one recorded content to which the parental lock is assigned is judged to be permitted to be viewed, selects the one recorded content from among a plurality of recorded contents that includes the at least one recorded content to which the parental lock is assigned.

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26. A content section obtaining method for use by a content playback apparatus that obtains a content section from content, and plays the obtained content section, the content section obtaining method comprising the steps of:

15 generating a judgment reference that varies dynamically over a playback time axis of the content; and

obtaining the content section by comparing the content with the judgment reference.

20 27. A content section obtaining-use computer program for use by a content playback apparatus that obtains a content section from content, and plays the obtained content section, the computer program comprising the steps of:

25 generating a judgment reference that varies dynamically over a playback time axis of the content; and

obtaining the content section by comparing the content with the judgment reference.

28. The computer program of Claim 27, wherein
the computer program is recorded on a computer-readable
recording medium.